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## University of Hawai'i at Mānoa

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March 6, 1998

Ms. Lourdes F. Carson  
NASA Grants Officer  
NASA Goddard Space Flight Center  
Mailstop 210.H  
Greenbelt, Maryland 20771

**SUBJECT:** Grant No. NAGW-2153

Dear Ms. Carson:

Please find enclosed the Final Technical Report for the subject grant entitled "Outer Solar System Nomenclature" under the direction of Dr. Tobias C. Owen. Copies are being sent to Dr. Henry Brinton, the NASA Center for Aerospace Information and the Defense Technical Information Center.

Thank you very much for your assistance with this project.

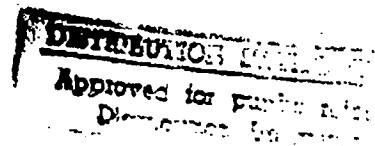
Sincerely yours,

*Gale T. Yamada*

Gale T. Yamada  
Administrative Officer

enclosure

cc: Dr. Henry Brinton, Code SR  
Dr. Tobias C. Owen  
UH Office of Research Services  
Office of Naval Research  
Center for Aerospace Information (CASI)  
Defense Technical Information Center (DTIC)



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**University of Hawaii**

**Final Technical Report**

**Submitted to the**

**National Aeronautics and Space Administration**

**Grant No. NAGW-2153**

**"Outer Solar System Nomenclature"**

**March 1, 1990 to September 30, 1997**

**Submitted by**

**Tobias C. Owen  
Principal Investigator  
Institute for Astronomy  
University of Hawaii**

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FINAL PROJECT REPORT  
OUTER SOLAR SYSTEM NOMENCLATURE  
NAGW 2153

The Principal Investigator's responsibilities on this grant fall into two categories according to his participation in the nomenclature work of the International Astronomical Union (IAU). Owen is chair of the Task Group for the Outer Solar System. He is also a member of the IAU's Working Group on Planetary and Satellite Nomenclature (WGPSN), which is composed of the chairs of the several Task Groups plus the presidents of two IAU Commissions and several outside consultants. The WGPSN is presided over by its President, Professor Kaare Aksnes from the Rosseland Institute for Theoretical Astrophysics in Oslo, Norway.

During the period under review, the major activity for the Outer Solar System Task Group (OSSTG) was the supervision of new nomenclature for surface features on the satellites of Jupiter, required by scientists on the Galileo Mission. The Galileo orbiter cameras have detected many features not seen by Voyager that require names. The categories for these names were established by the Task Group during the Voyager era, and it has been possible to maintain these categories for the new features, simply by adding names to existing name banks, except in the case of Io. The number of new features on Io has exceeded the capacity of the categories to produce names, so a new category — names from Dante's Inferno — has been added. All of this work was done in close collaboration with Jennifer Blue of the USGS in Flagstaff, AZ, who maintains the official name banks.

The OSSTG has approved the use of native American names for features on the surface of Titan and suitable names from this source must now be found and an appropriate name bank established. It is envisaged to include names from other pre-European inhabitants of other countries in this name bank.

In his capacity as a member of the WGPSN, Owen played an active role in the selection of craters on Mars to commemorate Alfred O. C. Nier, James Pollack and Harold Masursky, ultimately identifying the craters that were chosen in each case. He is now working with Mars Task Group Chair, Bradford Smith to find a suitable feature on Mars to commemorate Carl Sagan, and with WGPSN president Kaare Aksnes to find a feature on the moon for Eugene Shoemaker.

Owen organized an informal meeting of the WGPSN in Honolulu in October 1997 which was attended by Smith, Aksnes and Merton Davies. He will attend the next formal meeting of this group at COSPAR in Japan in July 1998.

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